

REMARKS

Claims 1-10 are pending in this application. Claims 1, 2, 6 and 7 have been amended. Reconsideration of the claims is respectfully requested.

35 U.S.C. §103, Obviousness

The Examiner has rejected claims 1-10 under 35 USC §103(a) as being unpatentable over Kazuya (JP 2001-171472) in view of Kraft et al. (US Pat. No. 5,308,370). This rejection is respectfully traversed.

The present invention set forth in claim 1 is directed to a method for fabricating a filtering member in which, after winding a wire, overlapping portions of the wire are bonded together in a layered manner through sintering for forming a mesh.

The method of the present invention comprises applying a contact surface pressure between portions of the wire to be bonded together and maintaining the contact surface pressure as equal to or higher than a predetermined level that is set in accordance with a sintering condition. The sintering is conducted in this state such that each bonding portion of the wire in a final product has a bonding strength equal to or greater than 4 N. The sintering condition is determined in accordance with contact surface pressure, lateral contact dimension between contact portions of the wire, and the number of bonding portions of the wire.

Thus, regardless of the relatively high pressure and high temperature caused by actuation of an airbag, the bonding portions of the wire 16 at the contact portions S are maintained without loosening. Accordingly, a relatively high bonding strength is ensured in the filter 15 as a final product with relatively low cost and improved efficiency. See page 10, lines 25-32.

In addition, by determining the sintering condition in accordance with contact surface pressure, lateral contact dimension between contact portions of the wire, and number bonding portions of the wire, an effective method for fabricating a filtering member can be achieved.

The invention set forth in claim 6 is directed to a method for fabricating a filter for an airbag inflator. For purposes of the present argument, the method of claim 6 has similar features and advantages as those of claim 1.

Koyama (JP 2001-171472) discloses a filter for an airbag inflator. This filter is made from a metal wire that is wound into a cylindrical shape around a jig with a specific tension and then sintered. The sintered filter is subjected to a compression test to measure a compressed

amount and a recovery ratio. The recovery ratio is measured base on lengths of the filter before and after the filter is compressed.

However, Koyama fails to disclose or suggest the claimed bonding strength, 4N, of each bonding portion of the wire in a final product. Koyama also fails to disclose or suggest that the sintering condition is determined in accordance with contact surface pressure, lateral contact dimension between contact portions of the wire, and number of bonding portions of the wire.

The specific tension disclosed in Koyama is merely the requirement for winding a filter, but not a requirement for sintering the filter. Accordingly, the specific tension taught in Koyama does not cover the claimed bonding strength of the final product.

Kraft et al. (U.S. 5,308,370 A) disclose a filter device for filtering a gas flow. This filter device is formed from a filter element exhibiting several filter material plies of varying permeability lying in series in the flow direction. The filter element is fashioned as a wrapped member produced by winding up a length of filter material. The length of filter material has sectionally different filter materials.

Accordingly, the structure of the Kraft's filter is different from the claimed filter that is formed from a wire.

If the sintering condition such as a range of sintering temperature and a range of sintering time period disclosed in the Koyama reference is applied to the Kraft's filter, the claimed invention could not have been achieved by a person with ordinary skilled in the art.

Accordingly, even if both references would be combined such combination would not produce the limitations of the claimed invention.

Because claims 2-5 and 7-10 depend from claims 1 and 6, respectively, they are distinguished from Koyama and Kraft for the reasons explained above.

Therefore, it is respectfully asserted that the rejection of claims 1-10 under 35 USC §103 has been overcome and should be withdrawn.

CONCLUSION

Applicant submits that all existing claims are now in a condition for allowance.

If there are any outstanding issues that the Examiner feels may be resolved by way of a telephone conference, the Examiner is invited to call Colin Cahoon at the below-listed telephone number if, in the opinion of the Examiner, such a telephone conference would expedite or aid the prosecution and examination of this application.

The Commissioner is hereby authorized to charge any payments that may be due or credit any overpayments to Carstens & Cahoon, LLP Deposit Account 50-0392.

Date: September 2, 2009

Respectfully submitted,

By: Christopher P. O'Hagan
Christopher P. O'Hagan
Registration No. 46,966
Attorney for Applicant
CARSTENS & CAHOON, LLP
PO Box 802334
Dallas, TX 75380
(972) 367-2001
(972) 367-2002 Fax